A LETTER OF MERIC CASAUBON D.D. &c. TO *Peter du Moulin* D. D. and Prebendarie of the ſame Church:

Concerning Natural experimental Philoſophie, and ſome books lately ſet out about it.

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Honoured Brother,

YOu have not forgotten, I dare ſay, (it is not ſo long ſince) where and when you were pleaſed to beſtow a Viſit upon me, two young Univerſitie men being then with me; and you came with a book in your hand, and delivered it to me with a ſmiling countenance, which, as ſoon as I had opened the book, I did interpret, having already conteſted with you more then once about the ſame matter, as though by it you hoped to ſtop my mouth for ever. I cannot ſay you did intend it ſo really: but ſo I did interpret it then; but it did fall out much otherwiſe. For after I had opened it, by the very Title of it, I was much confirmed in my former opinion, and profeſſed it ſo to you, which occaſioned much diſcourſe between us until I was weary, and (as my condition is now) ſomewhat ſpent. Ever ſince that, what I now write, hath been in my mind, and I have had thoughts to impart it to you long before, though ſtill ſomewhat hath diverted me. The matter in agitation between us (I need not tell you, I know) was: whether this way of Philoſophy, of late years much cried up in *London* and elſewhere; was, as ſet out by ſome, more likely to prove advantageous, or prejudicial, if not deſtructive, to good learning: by which I mean, (not excluding natural Philoſophy) what in former ages of the world, and by

many to this day (by you alſo I make no queſtion) hath been and is accounted true, ſolid, uſeful learning: which hath been cheriſhed and countenanced by Kings and Princes and Publick States, in their generations, in all places of Europe hitherto; and hath gotten credit and admiration to the Owners and Profeſſours of it during their lives, and after their death, immortal fame.

But before I enter upon the buſineſs, I muſt make my way by removing of a block, which I meet with artificially laid by ſome, to fright us in our progreſs, and hinder the freedom of our enquiry. It is this: Whether it be not a breach, if not of Allegiance, yet of that reſpect and reverence we ow to the *Royal Founder*, to except againſt any thing that is done, or written by any, who profeſs themſelves of the *Royal Society*? I ſhould not make ſuch a queſtion, but that I find juſt occaſion, as I conceive. I do not well underſtand the full extent of that ſpeech, uſed by ſome, *to diminiſh the Royal Society*. *Diminutio*, in the Civil Law, you know, is a very comprehenſive word, and reacheth to many things. Were it but a breach of good manners, and civility; or, as they ſpeak, *want of modeſty and breeding*, I would be loth to be guilty of it. But God forbid, that ſuch reaſoning ſhould paſs for current, in good earneſt. That his *Majeſty* would ſo far encourage any kind of learning, as not onely to be the *FOUNDER*, but ſtyle Himſelf the *PATRON* alſo of ſuch a *Society*, is an act well becoming the magnanimity of a great King, and to be entertained with humbleſt acknowledgements by all that pretend to learning. But to intereſt that *Sacred name*, in every thing, or any thing that is done, or written by any, that have the honour to be of that *Society*, though commended to us under

under the title of good and profitable learning, I think is not juſtifiable: neither is the whole *Society*, as I conceive, concerned (except it be owned by expreſs authority of the whole body) in what is done by any one or more members of the *Society*: it being very poſſible, that many, who even in thoſe things that concern learning and knowledge in general, are of different judgements and opinions, may yet agree in ſomewhat ſufficient to juſtifie their title to this *Royal Foundation*.

Give me leave to inſiſt a little (for it is a tender point) upon the danger, or unreaſonableneſs of ſuch remote inferences. *Daily publick Prayers*, you know, were at firſt inſtituted by Primitive Chriſtians, as the moſt immediate ſervice of Almighty God: grounding, not onely upon the practice of the Church, under the Law; but alſo upon the words of St Paul: *I exhort therefore &c. for kings, and all that are in authority, that we may lead a quiet and peaceable life in all godlineſs and honeſty*: and that the peace and welfare of kingdoms, the honour and ſafety of Kings and Princes, did very much depend on the due and daily performance of that *Service*, was ſo general a belief in thoſe days of exemplary piety, that we read of heathen Princes and Emperours, who, though not Chriſtians otherwiſe, yet have had ſo much faith and Chriſtianity, as to commend their ſafety to the Church upon that account. This, if you pleaſe, you may find out of good records of antiquity ſufficiently proved and atteſted, in a little Treatiſe *Of the uſe of Daily Publick Prayers*; written by me ſomewhat haſtily, to help a learned Biſhop againſt a pack of bold and confident Adverſaries: ſent by me to the late Reverend and learned Archbiſhop of *Armagh*, and by him, at the requeſt of that learned Biſhop, ſhortly after ſent

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to the Preſs. In England, beſide the authority of ſuch Precedents, and of St Pauls *Exhortation*, or inſtitution: that ſuch a *Service* is eſtabliſhed by the Authority of Kings (who alſo may in ſome reſpect, becauſe of thoſe many Cathedrals of their foundation, where it is moſt duly and ſolemnly performed, be ſtyled *Founders* of it in this kingdom:) and Parliaments, who knoweth not? Now, (to paſs by the conſequence of the Royal Authority, and what the wilful contempt of it may amount to) I ask: The honour, ſafety and proſperity of Kings, according to the belief of thoſe Primitive Chriſtians, whom all true Chriſtians, profeſs to honour and reverence, being ſo much concerned in thoſe *Prayers*; would it be charitable hence to infer, that none love the King truly, and ſtudy his ſafety, but thoſe that love and frequent them, when not otherwiſe lawfully let or hindred? That ſome hate and forbear them upon that account, (factious men otherwiſe, and Fanaticks, or openly ſchiſmatical) I make no queſtion: but to make a general concluſion of it, when we know that the ſame effect may proceed ſometimes from very different cauſes, would argue, I think, great want of judgement and diſcretion, and as great, if not greater, of charity. With much more reaſon I conclude, that a man may write againſt the opinions of ſome of the *Royal Society*; yea and cenſure them as they may deſerve, without any reflection at all upon the *Royal Founder*, or *Royal Society* in general.

In the next place, what made me judge of the Book, as I did, at the firſt opening of it, by ſome words in the Title-page, though probably I might tell you then, yet I will now further explain my ſelf. I obſerved there, *Practical uſeful learning*, appropriated to the way now in uſe, by experiments: and thoſe that go any other way,

way, and follow other ſtudies, which have been formerly in requeſt, ſtyled, *men of the Notional way*. By *Practical uſeful learning*, *Chymiſtry* and the *Mathematicks*, as the Author doth explain himſelf, are alſo comprehended; whatſoever is beſides, ſo far as I can underſtand by the book, is proſcribed, as *uſeleſs*, *notional* and *unprofitable*. I had obſerved it before in another book, written by a learned man, a great admirer and abetter of *Experimental Philoſophy*, who ſpeaks of the Ancients, and ancient learning with a ſhew of much more reſpect and moderation: but in effect, to the ſame purpoſe, to cry down all other ſtudies and learning, ordinarily comprehended under the title of *humane learning*, to be but *umbratick* things, *verbal* things, of little or no uſe, ſince this new light of *true real Knowledge* eſpecially. Now, what other arguments need they, either to advance the credit of their way, and of that way they commend to us; or to cry down any other way that hath hitherto been in requeſt; then to make the world beleeve, that it is of *no uſe?* You know what judgement was paſs'd againſt *the fig-tree, that bare no fruit:* And that *earth* or ground, which *inſtead of herbs meet for the uſe of men, beareth nothing but thorns and bryers*, (*diſputing* and *wrangling*, in their phraſe) is pronounced by St Paul, *accurſed*, and *worthy to be burned*. But, I ask; what is it that theſe account *uſeful*, and *uſeleſs?* For if nothing muſt be accounted *uſeful*, (as ſome ſeem to determine) but what doth afford ſome uſe for the neceſſities, or conveniencies of this preſent life; I do not know but that a Brewer, or a Baker, a skilful Horſeleech, or a Smith, or the like, may conteſt in point of true worth or deſert with many, who for their learning, as then thought, have been reputed generally, the

great Lights and Ornaments of their age: though such, as never medled in their writings with experimental philosophy. They that beleeve that man doth consist of two chief parts, the body and a soul, whereof the soul the more noble and more considerable part, as even Heathens most of them have determined it: natural reason will oblige them to beleeve, that a greater share of care and provision doth belong to that which is immortal, from the right ordering of which all true happiness, present or future, doth depend; then to that which is mortal, and naturally brutish, and of little continuance. Those men therefore, who have applied themselves by their writings to promote vertue and godliness, in their kind, (that is, so far as God was known to them) were generally thought to have deserved of mankind, as well (if not better) as the most renowned inventours, or promoters of useful Arts or Trades. Had *Aristotle* never written any thing but his *Ethicks*, (that incomparable piece) he deserved the thanks of all ages; and I make no question but in all ages, even since Christianity, many thousands have reaped the fruit of that incomparable work, which alone is sufficient where it meets with right palats to speak its worth; but compared with others, that have written of that argument since, and have not troden in his paths, becomes more illustrious. I might say the same of those *Aurea Carmina*, which are attributed to *Pythagoras*, and which *Galen* (that excellent both Philosopher and Physician) had in such esteem, that he did not onely commend them to others, as a sovereign antidote against the diseases of the mind, but himself doth profess of himself, that he was wont first to read, but afterwards to repeat them once or twice every day, for the benefit

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he reaped by them. So of *Cebes* his *Table*: of *Cicero's Offices*: and (not to name others) of *Epictetus* his *Enchiridion*, though much later then ſome of the reſt, yet not inferiour unto any. And here, by the way; both by him and ſome others that have written upon him, we may find this very point excellently well handled; Whether thoſe men who make it their work to reclaim men from that προσπάθεια, or *cloſe adherence* of the mind to the body and ſenſes (which moſt men are naturally prone to) to the care and culture of their ſouls, ought in reaſon to be accounted *unprofitable* to the Common-wealth; or rather, of all Profeſſions, the moſt *uſeful* and neceſſary. I wiſh ſome of our *Mechanicks*, who are ſo highly conceited of their way, laying aſide prejudice and preengagement (if they can) would take the pains to read thoſe admirable diſcourſes: it may be they would find, that the ſway of the times, more then any weight of right reaſon, hath led them hitherto, into this opinion.

But alas! poor *Ariſtotle*; your Author will not allow of above three books of his to be worth the reading; and his *Ethicks* is none of them. And elſewhere he doth queſtion, whether thoſe works, generally aſcribed to *Ariſtotle*, were, or are his indeed: whereby we may gueſs, though he have written againſt him, he ſaith, how well he was read in *Ariſtotle*. Elſe, the ſtyle of *Ariſtotle*, ſo conſtant to it ſelf every where, and in a manner unimitable; but much more the matter ſo ſolid and rational every where almoſt, would eaſily have convinced him. But certainly the light account he makes of him all along, reproaching his adverſary ſo often, for his love to and eſteem of *Ariſtotle*, would make a man admire what account he made of himſelf. I think

he had done well, before he had taken ſuch a task upon himſelf, to have made it appear (the eaſier task of the two, as I conceive) that all men that have been famous in former ages, for their judgement, wit and learning, were no ſuch thing really as they appeared unto the world, but meer *Idols* and *Phantaſms*, not true rational men, ſuch as this latter age hath produced; and their judgement therefore not at all to be regarded. Then indeed we might with more patience, and equanimity hear what he hath to ſay againſt *Ariſtotle*, for ſound and ſolid reaſon, and for all manner of knowledge attainable by meer man without divine revelation, the wonder of all ages hitherto. But not to inſiſt on former ages, I will name but one man of very freſh memory; What, do you think that *Julius Cæſar Scaliger*, for learning and judgement, may be put in the balance to be weighed with your Author? *Vir propter excellentem omnium diſciplinarum eruditionem admirandus:* So *Peterius*, that learned and judicious Jeſuite of him: and ſo, ſo many others, that a man out of all kind of writers might eaſily ſwell a book into a great volume of teſtimonies concerning that admirable man. He had read *Ariſtotle* to the purpoſe, it ſeems, again and again, by the uſe that he makes of him upon every occaſion: but ſeldom names him without ſome intimation of higheſt admiration and veneration, that can without Idolatry be deferred unto man. And what think you of meer Naturaliſts, ſuch as *Laurentius, Fabricius ab Aquapendente, Caſſerius Placentinus*, (I name them becauſe I have them by me at this time) and the like? Will their teſtimony be conſiderable? *Fabricius*, I remember, though he diſſent from *Ariſtotle*, ſometimes freely enough, yet ſo devout an admirer of *Ariſtotle*

was he, that ſomewhere he doth profeſs ſome kind of ſcrupulouſneſs to acknowledge that *Ariſtotle* was ignorant of any thing, in point of nature. *Caſſerius* ſaith little leſs. *Laurentius* tells us, what opinion the world (*Philoſophi omnes*) hath always had of *Ariſtotle*, ſtyling him, *verum naturæ interpretem, ejuſdem Genium & Lumen*, &c. which himſelf doth alſo ſubſcribe to: yet in the ſame place, he doth not onely complain of his ſtudied obſcurity, but alſo, as his judgement and the judgement of divers others, doth give us this account, that in his writings concerning nature in general, he was much more happy (beyond what hath ever been performed by any other:) then in them, concerning particular natures, whether of men or beaſts: which is a great commendation, the one proceeding from the ſtrength of his brain and rational abilities; the other from ſome defect of ſenſe or better information: which no man that beleeves him to have been a man, and no more, can wonder at, or revile him for. Yet, I beleeve (and therefore take notice of it) that from this might proceed that pretty conceit of ſome men, which paſſeth very current (I find it in your book twice or thrice) againſt *Ariſtotle* and his Philoſophy, among many; as if his way had been, firſt, in the retiredneſs and ſecrecy forſooth of his contemplative brain, without the trouble and conſideration of particular objects, to frame to himſelf *general Theories*, as certain principles, or fundamentals; and then to determine of the true nature of particular objects by thoſe *Theories*. A pretty fancy I cannot deny; and I doubt he that was the firſt author of this, may have many more of the ſame nature, if well look'd into. But I wonder that any, who can pretend ever to have look'd into *Ariſtotle*, can entertain ſuch

fancies.

fancies for real truth. For beſides thoſe books of his, which treat of the nature of particular things, altogether grounded upon matter of ſenſe and experience; by all his writings it doth clearly appear, how much he did aſcribe to experimental knowledge: which to recommend to us the more effectually; both in his *Ethicks* more then once, and in his *Metaphyſicks*, and elſewhere too (if I be not much miſtaken) he doth, as to matter of action, or ſucceſs, preſer *experience* without *art* or knowledge, before *art* and knowledge, without *experience*; though indeed otherwiſe he doth make art of it ſelf, (that is, general rules and maxims grounded at *firſt upon reiterated experience) and abſolutely, which doth look into the cauſes, and can give ſatisfactory reaſons of events, more commendable, then illiterate or irrational, though ſucceſsful experience. Not likely therefore that *Ariſtotle* would frame to himſelf (which had been the project of a mad man; and to beleeve it of him little better:) *general Theories*, not grounded at all, upon particular obſervations: but that he might be miſtaken, or defective in particular obſervations, (which as long as there be inquiſitive men in the world, may ſtill be increaſed and rectified) is very poſſible: and thereupon his *Theories*, by men of judgement and ingenuity, amended or perfected. As on the other ſide, particular obſervations until they be reduced to art or *theories*, that is, to general rules or maxims (which is the higheſt operation of the rational faculty) are not much uſeful; which made the great oracle of Medicine to ſay, that ἡ πεῖρα σφαλερὴ; and meer *Empiricks* have always been accounted dangerous men.

But having commended *Ariſtotles Ethicks* as I have done,

done, against which I know objections are made by more then one; I think my self bound to give you some further account about it. What those objections are, I shall not now enquire, or take upon me particularly to refute: but instead of that, for a general answer to all objections that are made, or can be made, I shall appeal to the *Divinity* of the tenth and last book of the said *Ethicks*, which as I conceive, with indifferent ingenious men, is very sufficient to make amends for all defects or defaults, if any such be granted. To give you a right estimate of that book, according to my apprehension; I cannot better then in saying, (though I will not say, that *Aristotle* intended it so,) that it contains, allowing it but some variation of terms, as must of necessity be supposed, a full and perfect *Paraphrase*, or Comment upon the first Psalm; whether penned by David himself, or by any other, but penned of purpose all men grant, as an *Introduction* to the rest of the Psalms, treating of mans *Summum bonum*, or *chiefest happiness*, wherein it doth consist. To begin with that which is positive, or affirmative: *His delight* saith the Psalmist, *is in the law of God*: to fulfill it, as I take it, and to frame his life thereby. See *Aristotle* from the fifth Chapter of the tenth book, where he begins to discourse concerning *beatitude*, first he doth by good and solid arguments prove and evince, that it must consist ἐν ταῖς κατ' ἀρετὴν ἐνεργείαις, *in the practice, or exercise of vertue*: which in the Gentiles was some kind of fulfilling of the Law, as we are taught by the Apostle. But then the Psalmist doth oppose *the seat of the scornful*: (so we translate: but the Hebrew word you know, doth comprehend all *mockers*, *jesters*, *buffoons* in general; and more particularly, such who have an art,

and

and make it their practiſe to turn all ſins into jeſting and merriment, as appears by *Proverbs* 14. 9. *Fools make a mock of ſin*: לץ: it is the ſame word. *Du Muis*, upon the place very well, That *no men are more pernicious*, and why:) doth oppoſe, I ſay, *the ſeat* of ſuch, whether *mockers*, or *jeſters*, to the practiſe or ſtudy of godlineſs and vertue. So doth *Ariſtotle* too, in the ſaid Chapter, very particularly. He calls them εὐτραπέλους and γελοίους: and ſaith that ſuch are in great requeſt with great men ordinarily, becauſe of their continual facetiouſneſs and merriment: but that true happineſs is to be found, not in ſuch mirth and jollity, (or jocantneſs,) except it be for a time, by way of neceſſary relaxation; but in *ſeriouſneſs*: and that great men are not always beſt judges of what is right. The Pſalmiſt ſaith, that ſuch an one *doth meditate in the law of God day and night*: *Ariſtotle* makes *meditation*, or *contemplation*, as he calls it, (the Hebrew word may comprehend both:) a further degree of perfection, whereby men (not forgetting the ſociety of men) approach neareſt unto God, and beſt reſemble him. The Pſalmiſt ſaith, *God knoweth the way of the righteous*: and that *he ſhall be as a tree planted*, &c. and that *whatſoever he doth ſhall proſper*. *Ariſtotle* ſaith, that ſuch an one in all *probability* (what could he ſay more, without Divine revelation?) is *moſt beloved of God?* (θεοφιλέστατος) and that God will *do him good*, or *requite him*, and that he is likely thereby to become *moſt happy*. Who alſo doth maintain, that this is the way for a man, (ἀπαθανατίζειν ἑαυτὸν) *to purchaſe immortality to himſelf*: there alſo reproving a ſpeech very rife in thoſe days among worldly men, (what may we think of them, who are ſo ſet upon the conveniences of this life that they will ſcarce allow any thing elſe to be conſiderable?) that

that *mortals so born, should not trouble their minds with the thought of things immortal.* What think you? doth this deserve the note or censure of *heathen notions*? why I say so you shall hear by and by. But I have done with *Aristotles Ethicks.*

Now to return to the magnificent Plea of *useful* knowledge; much such a judgement ordinary people made anciently of the most renowned Philosophers, as *Anaxagoras*, *Thales*, and others, whom they did acknowledge to teach πρῖτὰ μ̃, καὶ θαυμαστὰ, καὶ χαλεπὰ, καὶ δαιμόνια, that is, things in themselves *excellent* indeed, *profound* and *sublime:* ἄχρηστα δ̃, but *useless*, because they contributed nothing to the uses of this present life: as, *Aristotle* doth somewhere report. This in ignorant Heathens might be tolerable: but in Christians, great pretenders to knowledge, more to be wondred at. ¶ I lighted some years ago upon a little book intituled *The reformed Schoolmaster*, &c. but he treats of the reformation of *Universities* also, whose case he doth make so sad and lamentable, as nothing can be conceived more: but yet doth give us this comfort, that if he may have his will, or desire, they *may become a thousand times* (we may bate him nine hundred; I think one hundred will serve) *more useful.* Indeed I never read any man that did not pretend to immediate commission from God, speak more magisterially, and as it were authentically; but withal I must say, I never read any thing more whimsical and chimerical, then his *Reformation* doth appear unto me. He doth much relish of *Comenius* his project of making all men wise, and goes upon the same grounds. When I see fair Towns built in the air, and a sure commerce between those who inhabit the earth, and those of the Moon, whoever they are, established: I shall have some hopes that these projects, in case (which God forbid!)

they be beleeved and trial made, may come to ſomewhat. Whether your Author had his *Plùs ultrà* from thence, I know not; but it matters not; for I think no ſober man ever denied, but that all kind of learning (with Gods bleſſing) is capable of improvement: but withall it muſt be acknowledged, that many conceited, whimſical men, as *Lullus*, *Ramus*, and the like, have projected wayes of improvement, which, if generally received, would have proved very deſtructive to learning. Amongſt other paſſages of that little book, this is one: *Whatſoever in the teaching of tongues doth not tend to make them an help to traditional knowledge by the manifeſtation of real truths in ſciences, is ſuperfluous, and not to be inſiſted upon, eſpecially towards children: whence followeth that the curious ſtudy of Criticiſms and obſervation of ſtyles in Authors, and of ſtrains of wit, which ſpeak nothing of reality in ſciences, are to be left to ſuch as delight in Vanities more then in Truths.* *Truth* and *Reality* and *Sciences*; brave words are they not to work upon them, who either want will or wit to ſearch into the bottom of things, where in very deed, inſtead of *deeds* and *realities* nothing will be found but *words*! Such is his conceit, that boys and children muſt be taught things, before they be taught words or languages. His project was to advance the credit of *Janua linguarum*: every page almoſt hath them, and ſometimes he ſpeaks of them, as though all *uſeful learning* might be reduced to them. For my part, I wonder they were ever received into any good School, except it be to caſhier good authors out of them, as needleſs: whereas I think the beſt uſe of languages is the reading of ſuch authors, not for their words onely, but for the excellency of the matter, which in ſeveral kinds, and to ſeveral uſes, they do

do contain: and am very confident that where the reading of ſuch authors is out of faſhion, barbariſm and groſſeſt ignorance will quickly follow. I ſpeak it of Poets as well as others. I cannot but admire at the conceit of a more conſiderable man of the ſame *ſociety*, (as I conceive) who would erect a new kind of *Poetry*, grounded upon the Scriptures, and knowledge of Nature and experiments, and ſome other heads; excluding ancient *Mythology* (the chief ground and foundation of ancient Poetry) as *uſeleſs* and *fictitious*. What, would he have all ancient Poets, Greek and Latin, turned out of doors? Can ſuch a thing enter into the heart of men, that pretend to the improvement of learning? This indeed *Julian* the Apoſtate, did maliciouſly plot and enact againſt the Chriſtians of his time, forbidding them the uſe of publick Schools, and reading of ancient Poets: which by the Fathers of the Church was looked upon as none of the leaſt perſecutions. And indeed, if ancient Poets, with their *Mythology* be turn'd out of doors; all ancient authors muſt likewiſe, which, without a competent knowledge of ancient *Poets* and their *Mythology* (no more can ancient Fathers, Greek eſpecially, in very many places) cannot be underſtood: Of *Homer* particularly, as elſewhere in a peculiar *Diſſertation* of this ſubject, I have had occaſion more fully to declare, my opinion is, that by reaſon of his antiquity, and that conformity in many rites, ſpeeches and ſome choice ſentences, which may be obſerved in him with the Scriptures of the old Teſtament, (obſerved by ſome learned Commentators, as *Ribera* and ſome others in their frequent quotations out of *Homer*; which alſo made learned *Capellus* of *Sedan*, ſo confidently to profeſs his opinion, or ſuſpicion at leaſt, that the Scriptures of the old Teſta-

ment, were known to him) he doth not onely very much conduce to the right understanding of many obscure places in Scripture, but also may be some confirmation to the antiquity, and by consequent, in some degree to the truth of the same. And should I say, that St *Paul* was no stranger to *Homer*, (as I am sure, he was well read in *Demosthenes*) or *Homer* no stranger to him; I hope it would be no disparagement to St *Paul*, or matter of scandal to any judicious, sober man, no more then the citing of those Greek Poets (*Epimenides*, *Menander* and *Aratus*) their words, is or hath been: much inferiour, the best of them, to *Homer* in many respects. And for *Virgil* (the best of Poets after *Homer*) that God was pleased to make use of his incomparable wit, (whereof himself was the Author, or Donor) to celebrate the coming of his Son our Saviour, into the world; hath been the opinion of some ancient and later Christians; men of excellent judgement. But again, a great part of the ancient *Mythology*, though with much *Sophistication* generally, being derived from the Scriptures, as learned men anciently, and the most learned of this latter age have thought, and thereupon taken great pains, some of them to trace it to its first original, supposing that the Scriptures among the learned and judicious, would receive no small confirmation by their labours herein; how can it now be *dismissed*, or cashiered, without some wrong to the Scriptures; which never more (in this visible sad increase of Atheism every where) wanted all kind of confirmation!

But much more did I wonder at another passage of the same Author, in a more considerable subject then *Poetry* is. It is where he treats of the *Schoolmen*; favourably enough I must confess, as when he saith, *If they would*

would be content with any thing leſs then an Empire in learning, we would grant them very much. I think they are much to blame, if no leſs will content them: and they as much who uphold them upon that ſcore. All the reſt that follows this is very moderate and reaſonable. But the concluſion, *And yet I ſhould not doubt, (if it were not ſomewhat improper to the preſent diſcourſe) to prove, that even in Divinity it ſelf, they are not ſo neceſſary, as they are reputed to be; and that all, or moſt of our religious controverſies, may be as well decided by plain reaſon, and by conſiderations which may be fetched from the religion of mankind, the nature of government and humane ſociety, and Scripture it ſelf, as by the multitude of Authorities and ſubtilties of Diſputes, which have been heretofore in uſe:*] this I do not underſtand. According to ordinary conſtruction, the ſenſe is obvious enough; but a ſenſe ſo amazing, that it is not credible. It is well known that before the late troubles, a *Noble-man* of this Realm wrote a book intituled *De Veritate:* the end and driſt whereof was, out of the Religions of mankind to extract a Religion that ſhould need no Chriſt. And though they that licenſed it did not apprehend it ſo, it ſeems; (I did at firſt ſight) yet himſelf afterwards during the troubles in his *Epiſtola ad Sacerdotes,* printed with the reſt of his works, did pretty well unmask himſelf and openly ſhewed what opinion he had of Chriſtianity. Since him it is well known, that ſome body hath taken ſome pains to attemperate Chriſtianity to the laws of every Countrey, and commands of Supreme Powers: and this he doth ground, or endeavour to ground, (not as the other, who did ſcorn them) upon divers paſſages of *Scripture.* What can this import, in ordinary conſtruction, but a new Religion? Eſpecially when it is ſaid, that the

controverſies

controverſies of it may be decided by plain reaſon, as well as by the multitude of Authorities, and ſubtilties of Diſputes, which have been heretofore in uſe. For the *controverſies of Chriſtianity* every body knows began in the Apoſtles time, (as doth appear by their writings, a great part of which is ſpent on that argument) and being proſecuted and increaſed in ſucceeding ages (according to old *Simeons* prophecy concerning Chriſt, εἰς σημεῖον ἀντιλεγόμενον: Luke 2. 34. the effect of which propheſie, as alſo of S. Pauls, *Oportet hæreſes eſſe*, will continue to the worlds end) by an hoſt of Hereticks and Schiſmaticks, who have been happily repreſſed and repelled by thoſe bleſſed Fathers, and authority of general Councils and Provincial, which every age afforded, whoſe excellent works by a ſingular providence of God, are yet for the moſt part, extant: who can expect, or imagine, that any other courſe can be available to the maintenance of true Chriſtianity? And certainly, when and where men (whether through force, or want of good learning) ſhall be made uncapable to uphold their faith with ſound reaſoning and diſputing (which they call *wrangling*) what will be the iſſue, or who will get by it, any man may gueſs.

Hoc Ithacus velit, & magno mercentur Atridæ:

I ſhall ſay no more. I profeſs ſincerely, that I can make no other ſenſe of the words: I ſay therefore, I do not underſtand them. Yet I muſt acknowledge, that the ſame Author doth elſewhere ſpeak of Chriſtian Religion, and the chief myſteries of it, very reverently and zealouſly, much abhorring, or profeſſing to abhor all innovations in it, or that it ſhould ſuffer in any thing by

by *Experimental Philoſophie*; yet even there, he doth not onely fetch the firſt eſtabliſhment of it, (which to me ſounds but odly, to ſay no more) from Experiments, calling *miracles Divine Experiments:* but alſo doth commend unto us, men of *honeſty, trade and buſineſs*: (ſuch as deal in *Experiments*, he doth mean certainly) as the beſt upholders, or *teſtifiers* of it; rather then men *of craft and ſpeculation:* alleadging to that end the example of the Apoſtles: who indeed, moſt of them, by their profeſſion at firſt, (and ſuch choſen then of purpoſe by a ſingular providence) were no better then illiterate tradeſmen and labourers: but (which he doth not tell us) were not onely long taught by Chriſt their Maſter; but alſo immediately and miraculouſly inſpired (beſides the power of miracles given them) by God, before they began to preach the Goſpel unto men: none of which things, I think, belong to the modern profeſſors of *Experimental philoſophie.* By men of *craft and ſpeculation*, by the drift and tenor of his diſcourſe he can intend no other then ancient Fathers, and Schoolmen and late learned Writers of *Controverſies.* Now ſuch an aſſertion, I conceive not onely prejudicial, but very deſtructive to true Religion and Chriſtianity. Theſe things how to be reconciled, I profeſs I know not. To ſpeak therefore as moderately as I can, I ſaid, and ſay again, I do not underſtand him. If you do, I ſhall be beholding to you to help me.

But I have not yet done with our *School-Reformer. Whence followeth*, ſaith he, *that the curious ſtudy of Criticiſms and obſervation of ſtyles in Authors*, &c. And where have we a Commentator almoſt, either upon the Scripture (beſides thoſe lately collected and ſet out in many volumes, under the name of *Criticks*) or upon any good Author,

Author, Greek or Latin, that is not put to his *criticisms* sometimes, and *observation of styles?* which in very deed (observation of styles) is as considerable a study for the preservation and vindication of all kind of truth, whether sacred, (all truth is, more or less) or civil, wherein whole kingdoms and Commonweals are much concerned sometimes, as any study can be. And what think you of *Longinus*, whose treatise περὶ ὕψους, or *de sublimi dicendi genere*, (not many years ago set out by a very learned and worthy man, Dr *Langbaine*, Provost of *Queens* Colledge in *Oxford*) hath been so much commended and admired by learned men; when he saith: ἡ τῶν λόγων κρίσις ἐστὶ πολλῆς πείρας τελευταῖον ὀπιγέννημα: so diametrically opposite? God bless the Universities, and University-Libraries, from such Reformers!

I now return to your Book; where I meet with an Objection against old learning and *Aristotle* particularly, which is made by more then one, but by your Author (as he doth not want words to set out his matter to the best advantage) pressed very vigorously: which is in his own words, *that it hath kept him from surveying the works of God, that magnifie and discover their Author, from which onely the true Philosophie is obtained.* Good God! can any body that hath but looked into *Aristotle*, though never so perfunctorily (except it be by the help of some glass that represents things quite contrary) say so? But he goes on: *And the zeal I have for Almighty God his glory discovered in his creatures hath inspired me with some smartness and severity against heathen notions, which have so unhappily diverted learned men from the study of Gods great book, universal nature; and consequently robbed him of that honour, and those acclamations*

that

that are due to him for thoſe admirable reſults of his wiſdom and goodneſs. This Author (I ſaid before) doth not want words: he can expreſs himſelf ſmartly enough upon very light occaſions: which in a good cauſe is no ſmall commendation: but otherwiſe I ſhould have been very ſuſpicious, if not confident, he had borrowed this goodly language from ſome profane Chymiſt, ſuch as our *Robert Fludd* was, with whom ſuch profeſſions of zeal for the glory of God are very frequent and ordinary: and to that end to ſet out his glory in its greateſt luſtre, doth propoſe unto us the conſideration of the *Philoſophers ſtone*, applying all or moſt myſteries of the Scripture to it, as that wherein onely, or chiefly, the Goodneſs, Power and Wiſdom of God is to be ſeen and admired: ſo that in very truth, his zeal was more for the *Philoſophers ſtone*, then *God*; or, the *Philoſophers ſtone*, a God of his own making, for which he was ſo zealous. But this I cannot averr upon mine own credit. For though his books, when I was very young & curious enough to pry into every thing that promiſed ſomewhat more then ordinary, did offer themſelves to me in Book-ſellers ſhops; yet I profeſs I could never diſpenſe ſo much with my reaſon or conſcience, as to read long, where I found nothing but what I judged in a high degree both impertinent and blaſphemous. I muſt therefore diſcharge my ſelf upon learned *Gaſſendus*, who together with *Merſennus*, will I think make good what I have ſaid of him to the full. But indeed it is the common language of all extravagant Chymiſts: they all, as many as I have ſeen that are ſuch, inſiſt upon the ſame thing. Neither is it their plea, or language onely; but of all men generally, who profeſſing Chriſtianity would raiſe admiration, by broaching unheard of myſteries. There be men in the world we know,

who maintain with much ſhew of zeal and holineſs, that the ſtars of heaven are ſo many ſignificant Characters and Hieroglyphicks, there placed by God of purpoſe the better to manifeſt his Wiſdom to the beholders, and from the right reading & underſtanding whereof greateſt myſteries depend. Neither want they ſome places of Scripture, which they miſerably abuſe to countenance the buſineſs. *Gaſarell* is a great abetter of this *heavenly* myſtery. The *Glory of God*, and the *Wiſdom of God* here alſo muſt be the pretence: which to oppoſe (in very truth, the reſult and product of ſick brains hunting after Novelties) how can it be leſs then *heathenish* profaneneſs and impiety. Yes, if you will beleeve them. But granting, as I do, and all men will, that well conſider of it, that *præſentem Deum qualibet herba:* that there is nothing in nature, in ſight ſo inconſiderable, but may give an intelligent man matter and occaſion to admire and magnifie the Power and Wiſdom of God. Is the conſideration of all thoſe, (mentioned in this book) or like curioſities, *the Great Book* of God, from which men muſt learn the great Power and Wiſdom of the Creator? It is ordinary enough indeed (obſerved by many) among men to wonder at nothing, though never ſo wonderful and admirable, but what is unuſual, far fetch'd, and ſeldom ſeen. Many who never took notice of either Sun or Moon, and the benefits of either; the viciſſitudes of the year; the flux and reflux of the Sea and the like, to admire them, or God in them, becauſe daily and ordinary: will yet gaze with wonder at a Meteor, the ſhooting of a Star, as they call it, or an *ignis fatuus*, and the like. But they are not thought the wiſeſt of men, that are of that temper. *David*, I hope, underſtood wherein the *Glory of God* conſiſted, and for what God himſelf would be magnified by men.

men principally, as well as another. We do not find by any of those admirable Psalms that are written of that subject, that any other works of God are specified, but those that are very visible to all men, sufficient also to make God visible to them, who have so much grace (which wicked *Epicurus* had not) to beleeve that they were not made to eat and drink, and to enjoy the pleasures of this life; but to observe the works of God, and to glorifie him therefore. And besides those admirable Works of the Creation, which many now (too many) taught by *Epicurus* and his mates, are apt to despise and vilifie, as being the works not of a wise *God*, but blinde *atoms*: there be other works of God not less to be admired: and those be the Works of his Providence and Government of the World; which the same Psalmist in his 107. Psalm, doth very particularly insist upon, and doth advise all men to consider well: *they that are wise*, saith he, *will consider these things*; implying also, as I conceive, that the consideration of those things will make a man *wise*; so that it is very possible, if we beleeve him, for a man to be both wise and religious; a great admirer of Gods works, his Goodness, Wisdom and Power; who never understood, or shall understand any of those things, never known before, as we are told here. After all this, we need less wonder, that your Authour (I pray excuse me, that I call him so, not that I think you are bound to maintain whatsoever he saith, but because I had him first from you) should appropriate *substantial wisdom* to this kind of Experimental Philosophy: though I hope he doth not intend thereby *Solomons* תושיה in our English, *found wisdom*: intended by *Solomon* of the true fear and sanctifying knowledge of God, to which the promises of eternal life are annexed:

from whence it would follow, that according to him, none can be ſaved but by this way of Philoſophy. But I will be more charitable then to think he could forget himſelf ſo much, though ſome may juſtly ſtumble at ſuch ſuperlative expreſſions, and his Philoſophy (with ſober men) more likely to loſe then to gain by them. For though I deny not (I ſaid it before, and ſay it again) that the ſtudy of Nature to a man that hath grace, and is well grounded in the principles of Faith, may afford ſomewhat beſide the known and moſt viſible works of God, as Sun and ſtars, *&c.* (wherein God, as the Scripture and wiſeſt heathens did teach, is moſt viſible) to the *glory of God*, and acknowledgment of his *Power and Wiſdom*: yet truly I think they do not go a right way, either to improve the *Glory of God*, or humane wiſdom, who do ſo magnifie this ſtudy, as though there were no other wiſdom in the world to be thought of, or purſued after; that make it the onely *uſeful*, true, ſolid learning, to which they would have all Schools and Univerſities fitted, and to which the Nobility of the land are invited, as to the employment of all employments moſt worthy their entertainment. I think the reading of Hiſtories, and military exerciſes (among which *hunting* is reckoned) which may fit them to do their King and Countrey ſervice; to maintain the credit of their Anceſtors; will much more become them, then attending on furnaces, or raking into the entrals of men, or beaſts, to find ſomewhat, which it may be will never make them much wiſer when they know it, nor ever prove of any great uſe. Other employments which exerciſe the body, beſide that they are more creditable, they preſerve health alſo, and keep the body in a conſtant readineſs for more neceſſary employments, if occaſion be. And though reading of hiſtories doth

doth not exerciſe the body, yet it may fit them for action; and if they be read with delight, they may contribute much, not onely to compoſe the mind, in greateſt diſturbances; but alſo to help, yea cure the body, when nothing elſe will. So it happened to two great Princes, (*Bodinus* is my Author at this time, and he is one that may be truſted in matter of hiſtory) *Alphonſus* and *Ferdinandus* Kings of *Spain* and *Sicily*, who when no Phyſick or Phyſicians could do them good toward the recovery of their health; did own it, (under God) the one to the reading of *Livy*; and the other of *Quintus Curtius*. The ſame is reported of *Laurentius Medices*, (that excellent Prince, both learned himſelf, and a great promoter of learning) as the ſame *Bodinus* doth more particularly give account.

I could tell you ſome ſtories of my ſelf, how ſtudious I have been from my youth, of the knowledge of nature in general: not to commend my proficiency unto you, (I have no reaſon, which I may partly impute to my ſufferings in many kinds) but probably to ſatisfie you, that I am ſtill a great lover and honourer of it. But when I read what mighty things ſome men promiſe themſelves and others of their way: what braggings and boaſtings: what contempt of all other things: it makes me think of the Hebrew proverb, *Non volentis, neque currentis, &c.* whether here alſo, not conſiderable: that is, whether it be probable, that God will give a bleſſing to ſuch a violent purſuit, that will not keep within its bounds, but (as the matter is propoſed unto us by ſome writers; for I go no farther, nor can) doth aſpire to an abſolute Soveraignty over all, that in ſo many ages of the world hath been accounted *uſeful* learning and knowledge. A man indeed may plauſibly ſuppoſe, that if rareſt things and moſt beneficial,

ficial, (ſome of them) as the invention of the *Compaſs:* of *Printing:* of *Guns* and *Powder:* of a *new world,* and the like, have been found out by the inquiſitiveneſs, or induſtry of ſome private men; what may we not hope of the joynt labours of an whole nation, all men being invited and admitted, rich and poor, learned and unlearned? Yet ſet it be remembred withall, that there is a ſupreme cauſe, which hath a ſecret influence into all the endeavours of men, to promote or to put back; to bleſs or to blaſt, as it pleaſeth. God knows his own time, and when that time is come, one ſingle man ſhall do more perchance, then a combination of many thouſands, at another time. A man might give a probable reaſon, now it is done, why God would reſerve the diſcovery of the New world, lately found out, to theſe times, and why it was a very ſeaſonable, for his glory, and the truth of his promiſes, diſcovery then. I have ſaid ſomewhat of it elſewhere, which I will not trouble you with here. Now, in order to that diſcovery, and what enſued upon it; the *Compaſs* and the invention of *gun-powder* was not expedient onely, but in a manner neceſſary. The invention of *Printing* did much promote learning, and learning (good *uſeful* learning) that *reformation*, which God intended in his Church. Every thing hath its proper time, and that time is a ſecret of Gods diſpenſation, which muſt be left to God, though man may ſometimes not improbably gueſs, or conjecture. *Baptiſta Porta* was a man that had as great helps and encouragements to ſeek into the ſecrets of nature, as ever any man ſince *Ariſtotle* had. He began betimes, he was not much above fifteen years of age (as if Providence had deſigned him for ſuch a work) when he began to appear in Print, as a Naturaliſt; and his work was ſo well accepted of in the world that it was (ſet out in Latin

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at first, as I conceive) soon translated, himself tells us, into the French, Italian, Spanish and Arabick Tongues. From that time for thirty five years he followed it with assiduous and indefatigable industry. He was a man of some means himself, it seems, and had large contributions from great men, Cardinals and others: he made his house a kind of Academy for all men that had any curiosity that way: and himself travelled divers countreys to confer with others. He neglected not Tradesmen and Artificers; and whither he could not convey his person, he did address himself by letters, with much earnestness and instancy: and he professeth, that it was always his greatest care not to take things upon trust, but to make trial first himself, if possible, of what he doth deliver for truth to others. What might not be expected from such a man? I will not say, he hath done nothing; I should do him and the truth great wrong if I did. He hath certainly many secrets, which were first published and perfected by himself; and I think it were a very good work, if some men studious and well qualified that way would upon trial declare, what they find in him certain and unquestionable, and what otherwise, that so we might know what men may certainly trust to. But what ever he hath done, to make the most of it, will not amount, for the admirableness and usefulness of it, to what hath been invented, or found by some one single man: from whence I conclude, that greatest secrets will not be extorted from God, by a kind of violence and presumption, but that man doing his part in his calling, either as a *Mechanick*, or *Philosopher*, God must be left to his own will and pleasure.

And whereas a long Inventory is given by your Author, of things lately discovered, that were not known to the Ancients; I think it would have been the part of an impartial

impartial man, to have told us at the ſame time, that we have loſt ſome things alſo known to the Ancients, and what they are, which happily might deſerve as much reſpect; ſo much at leaſt as not to be paſſed in ſilence. Many ſuch things (beſides what is collected by *Pancirollus*, in a Treatiſe of that Argument) have been obſerved by more then one, Phyſicians and others, all which I cannot call to mind ſuddenly. One thing may be *cutting for the ſtone in the kidneys*, which in *Hippocrates* time was practiſed (I have read it in more then one) with good ſucceſs; but now, and ever ſince *Galens* time (for which ſome blame him) loſt and forgotten. To this, divers other things are added by learned Phyſicians, as that which they call *diſſectio in Empyematibus: exuſtio in jecoris humoribus: cranii perforatio in aqua cerebri: ſectio ſupra oculum in ſuffuſionibus: extractio aquæ intercutis*: which laſt, though ſome venture upon in theſe days alſo, yet it is obſerved that few or none eſcape;, for want of the right way. To theſe I make no queſtion but many more might be added, and I am ſure I have met with more in their books, which I do not at this time remember. Whether *Galen* had any knowledge of the *venæ lacteæ*, and the like, I know not; but I am confident he had that knowledge of all the *muſcles*, *ſinews*, *arteries*, *fibers* and the like, and their proper uſe in every part of the body, (as doth appear by thoſe admirable books he hath written of that ſubject) as I think few Phyſicians have at this day: of which knowledge what uſe he made may appear by one ſtory, which I remember to have read in him. A young boy belonging to a great man in *Rome*, had received ſome hurt in his body, by a fall out of a Coach, or Chariot, ſuch as they had in thoſe days. The boy was very dear to his Maſter, who ſpared no coſt to have him perfectly cured. Many Phyſi-

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cians and Chirurgeons were employed: but for all they could do, two fingers of one of his hands continued as it were dead. *Galen* happened to come to *Rome* about that time, and was invited by the great man to ſee the boy; he did, and being well informed of all particulars of his fall, he preſently took away all that he found applied to the ſick fingers, and applied ſomewhat to one of the bones of his back, whereupon the fingers immediately, or ſoon after recovered their former uſe & ſtrength. Yet I know *Veſalius* made it his buſineſs to contradict *Galen* as much as he could: but other later Anatomiſts have defended him; and *Veſalius*, though generally acknowledged an excellent Anatomiſt, hath found ſome who have taken as much pains to contradict him. It is my opinion, that there is ſcarce any art, or faculty, wherein we do not come ſhort of the Ancients. Indeed their induſtry, much provoked by the greatneſs of rewards, was greater generally; that cannot be denied. *Painting*, *Carving* the *Statuaria*, are in a manner loſt, in compariſon of what they had attained to. So is the Art of *Coyning* of money, as uſed in the beſt times of the Roman Empire: beſt Writers and Artificers of theſe days acknowledge it. So is *Muſick*. *Ludovicus Vives* (beſides *Pancirollus* before named) was of that opinion, I am ſure: and there is ſo much to be ſaid, that it is ſo; that I do not ſee how it can be doubted, or denied by any man. The ſecret of thoſe *eternal Lamps*, as we may call them, found in divers ancient graves, though ſo much, by more then one, hath been written of them, continues a ſecret to this day: and I doubt whether modern *Chymiſtry*, ſo much admired by ſome men, afford any thing that deſerves more admiration. Doth any body pretend in theſe days to underſtand the *Mathematicks*, as *Archimedes* did? What would not men, Kings and Princes give for one of his in-

ventions? But I have ſaid more of him very lately.

Hitherto nothing hath been ſaid to impair the credit or uſefulneſs of *Natural* or *Experimental* Philoſophy: but that we would not allow it to uſurp upon all other learning, as not conſiderable in compariſon. Now I crave leave to tell you, that it is (as all good things, more or leſs) very apt to be abuſed and to degenerate into *Atheiſm*. Men that are much fixed upon matter and ſecundary cauſes and ſenſual objects, if great care be not taken, may in time, (there be many examples) and by degrees forget that there be ſuch things in the world as *Spirits*, ſubſtances really exiſting and of great power, though not viſible, or palpable by their nature; forget I ſay, and conſequently diſcredit *ſupernatural operations*: and at laſt, that there is a God, and that their ſouls are immortal. This is a great precipice; and the contempt of all other learning an ill preſage. I cannot tell what ſhould make the *Metaphyſicks*, that noble ſcience, ſo deſpicable unto them: them I mean, who have declared themſelves and their opinion of it. Indeed, they have nothing to do with the ſenſes, and may be called *Notional*: but real though, and the more abſtracted from the ſenſes, therefore the more divine. What a coil hath been kept with *Carteſius's Ego cogito*: to prove the immortality of the ſoul thereby? How much more effectually may it be proved by the capacity men have of *Metaphyſical* contemplations, or the conſideration of *Ens quatenus Ens*, ſo abſtracted from all that is ſenſual and material? For my part, I profeſs, (next the myſteries of our faith) I never have been more ſenſible of the immortality of humane ſouls, then when I had the happineſs to be converſant with that noble Science. To me truly it is no good ſigne, that this ſecondary kind of Theology, or Divinity, (and ſo called by many you know)

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is ſo out of requeſt. But Natural Philoſophy I grant, is more taking and bewitching generally: there is a plain reaſon for it: and though cryed up for the onely *uſeful* knowledge, yet if well conſidered, it may be found ſometimes, to have much more of pleaſure and curioſity in it then uſe and profit; even in that ſenſe (for what is truly *uſeful* and *profitable*, or moſt *uſeful* and *profitable*, is another queſtion) which they intend.

Yet (Give me leave, I pray, to tell you this pretty ſtory by the way) if we muſt, or may beleeve every thing that is written by men addicted to this way, we may find wonderful effects of it, even to *moralize* men; which indeed is the beſt uſe of any worldly thing which can be made. *Gaſſendus* in the life of *Peyreskius* a right worthy man, and great Patron of all kind of learning, hath this ſtory of him: *Dicebat verò nihil ſibi unquam animi regendi perſuaſionem æquè feciſſe, &c.* Give me leave to tell it you in Engliſh, though I know you a great Maſter of the Latin Tongue. *Peyreskius*, it ſeems, had ſhut in a *microſcope*, a *louſe* and a *flie* together; how they fell out *Gaſſendus* doth not tell us; but it ſeems they were not long together but they began to quarrel and to fight, and *Peyreskius* was a ſpectator of the combat: where he obſerved, that the *louſe* (the more paſſionate of the two, it ſeems) was ſo diſtracted and vexed, that after reiterated goings to and fro, (whether as a coward, to run away; or for the advantage of freſh onſets he doth not tell us) all the bloud of his head was ſunk into his tail; the effect he ſaith, of a great paſſion (he was ſtriving for his life, a very natural paſſion this) and very prejudicial to the ſtate of the body. By this ſight *Gaſſendus* tells us *Peyreskius* profited more to rule his paſſions in the reſt of his life, then he had done by any thing he had heard, or read before. This is the

ſtory: which, when I conſider the Worth and Nobleneſs of the man, of whom it is written, I could wiſh that *Gaſſendus* had left out: What? *Peyreskius*, ſo learned, ſo wiſe a man, to profit more by the ſight of ſuch a combat, and the demeanour of the *louſe* in it, in a thing of ſuch conſequence to a mans life, then he had done by the reading of ſo many Philoſophers, who have written ſo excellently of that ſubject, (and among other things, have not omitted this very particular, the ghaſtly countenance and deformity of a man in paſſion, and the diſeaſes and diſmal accidents it doth expoſe him to) or the precepts and perſwaſions of the *Word of God*, always divine; but in this Argument, even to humane reaſon [illegible] excellent and ſingular? *Galen* indeed, I remember, [illegible] ſtory, how by ſome chance being an eye-witneſs to the impatience of a man, who becauſe when he knocked at a door was anſwered, The party was not at home, fell into ſuch a rage and fury, both in words and actions, as no mad man could out do: it made ſuch impreſſion in him that he was the better for it all his life after. This is ſomewhat like, as the ſight of a drunken man may work upon an ingenuous youth, to make him abhor drunkenneſs for ever. But that the ſight of the *blood of a louſe*, paſſing from the head to the tail, (which perchance is no ſuch extraordinary thing in a *louſe*) ſhould be of ſuch force with ſo brave a man, as *Peyreskius* was, above all that he had ever read or obſerved upon that ſubject; and that he ſhould as it were in thankfulneſs to the *louſe*, make an acknowledgement of it to his friends, I have not faith enough to beleeve *Gaſſendus* in this: but rather beleeve, or ſuſpect that *Gaſſendus* made this pretty ſtory, either upon occaſion of ſomewhat that *Peyreskius* had told him of a *louſe* or a *flie*, but not to that purpoſe; or of purpoſe to gratifie

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ſome friends, who would be glad to hear what uſe can be made, even in point of life and manners, of a *microſcope*. But you will ſay perchance, doth not wiſe *Solomon* ſay, *Go to the Ant thou ſluggard?* &c. Yes, he doth indeed, but to the ſluggard: *pigro, ὀκνηρῷ*: words of great weight: as elſewhere I have ſhewed: not to ſuch a man as *Peyreskius* was; nor as if *Ants* by their example could teach men, what their own reaſon and the good inſtructions of other men (beſide the Scripture) could not: but to make ſuch wretches more ſenſible of their degenerating into brutiſhneſs; when they ſee ſuch acts of reaſon performed by thoſe creatures by meer inſtinct of nature, which neither their own reaſon, nor the reaſon (good inſtruction) of other men can perſwade them to. Beſides, he ſends them to what will not require the labour, or curioſity of much obſervation, or inquiſition; but to that which is very obvious to all men. Add, that Ants certainly, are more noble creatures then *Lice*, becauſe they live in common, and have a form of government among themſelves, which doth preſuppoſe ſome kind of reaſon, or ſomewhat anſwerable to reaſon in men. To this purpoſe, I remember I have read the deſcription of a City made (I cannot ſay built) by *Ants*; the Author whereof is no leſs a man then a learned Biſhop, as by the elegancy of his ſtyle I gueſs him to have been. Learned *Gillius* I am ſure is not more accurate in the deſcription of *Conſtantinople*, then he is (for the bigneſs of it: for I would not have you think, that it is any thing near ſo big as *Conſtantinople*) in the deſcription of this *city* of Ants. He hath the dimenſions of the longitude and latitude of every ſtreet in it, and the particulars of ſome publick places belonging to it, with much accurateneſs. He writes it in good earneſt; and for my part I beleeve him; though if you do not, I ſhall not

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account you an Infidel for it. Yet I do not deny, but some good may come, even in matters of life, by the observation of some actions in brutes: but as good, so evil also, when men not knowing, or forgetting whose image they bare, are more apt (so the greater number) to prostitute their reason to meer nature, then to rectifie nature by right reason. We read in *Herodotus* of a people who thought carnal copulation lawful enough in their Temples, because they observed that beasts that were brought to and kept in Temples for sacrifices, made no conscience of it. So *Pontus Heuterus* of *Delph* in *Holland*, grounding especially upon the custom of brute beasts, would infer the lawfulness of *incest* among men: *Non illa* (natura) *matrem agnoscit, non sororem, &c.* which is very horrible. And I could name some body else, who doth not say much less; but for the reputation he hath in the world I will spare his name. And what will you say to him, who out of his study (he saith, not very busie then certainly:) having observed the carriage of a Sparrow (the most lascivious of all creatures, as is observed by some Naturalists) towards its mate, (*vicies repetito coitu, & indè ex langnore ad terram decidente*) began to quarrel with God Almighty (*en sortem iniquam, hoc passeribus datum, negatum hominibus!*) that he had made him a man and not a Sparrow. It were to be wished that they that are destined to the study of Nature, were such as have attained by their years to ordinary discretion, and are well grounded in Religion: I know not what we may expect of wanton *Boyes*, whom some would have trained up in those studies betimes.

But another danger is: may not a man go too far in this study, and overvalue his progress so far, as to think nothing out of his reach? It was a noble attempt (as to man) of them that built, or would have built the tower of *Babel*,

bel, whose top might reach to Heaven: It is not likely they could be so simple, as to think really they should reach to Heaven by it: they might think they should be somewhat nearer perchance; and however, get a name among men in after ages, that they that built such a *tower*, were somewhat above men. But confusion was their reward. I have no reason to be against the *Art of flying*, if discoverable by humane industry; I have reaped the pleasures of it in my dreams more then once; and I thought no pleasure comparable to it, though but in a dream. Yet I doubt it may have somewhat of the Babylonish presumption in the eyes of God; and that such high curiosities are so far from being *useful*, that they may be dangerous. *Alas aut expectare, aut sperare, intemperantis & naturæ suæ conditionem ignorantis animi est:* is *Gassendus* his judgement upon the matter, which I hope will excuse me. Yet I must confess, I think there is less offence in the conceit of *Artificial flying* then in the conceit of *Urim* and *Thummim*, being an *Artificial Chymical preparation*, whoever was the Author of it; which I think deserved to be censured as impious: and if such liberty be taken, or allowed, I know not how far it may proceed, or how soon *Robert Flud* his blasphemies, which *Gassendus* hath censured and confuted may be received for *useful* truths or learning.

But I have done. What I had to except against the book you brought me, I have told you. I must now thank you for it. For in very truth, his *Divinity* at the end, which is somewhat mystical (I hope I do not understand it) and those two particulars, his contempt of *Aristotle*, and his censuring all other learning besides *Experimental* Philosophy, and what tendeth to it as *useless*, and meer *wrangling* and *disputing*, excepted: I have read the rest, wherein he doth give us an exact account of late discoveries,

veties, with much pleaſure. For though I think many ages may paſs before the uſe of many of thoſe particulars is known; yet *Ariſtotle* hath taught me, (and he proves it excellently) that nothing can be in nature ſo mean, or ſo vile, but deſerves to be taken notice of, and will afford to an ingenious ſpeculative man, matter of pleaſure and delight.

S^r, I know your relations to ſome of eminent worth and piety in that *Honourable Society*, whom though we have not the happineſs to know otherwiſe, then by the fame of their writings; yet we honour their worth as much as you do. I hope you do not think any thing I have written can reflect upon any ſuch. No, nor upon any others, farther then in thoſe particulars I have mentioned. You know my condition, and Judge I hope ſo charitably, that I would not go out of the World, but in perfect love and charity with all men. As long as I live continue unto me, I pray, the comfort of your love, and good opinion, who am,

Your affectionate Brother,
and humble Servant,
MERIC CASAUBON.